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SDCS-ER-76-94

SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Northern Sinkiang Province, China, 20 March 1976

K.J. Hill, M.S. Dawkins, and M.D. Gillispie
Alexandria Laboratories

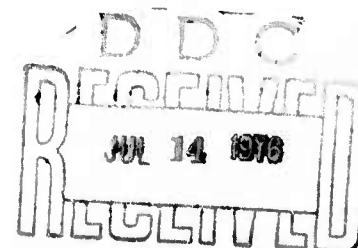
Teledyne Geotech, 314 Montgomery Street, Alexandria, Virginia 22314

June 1976

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SDCS EVENT REPORT NO. 94

Northern Sinkiang Province, China, 20 March 1976

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	m_b	M_s
NORSAR	04:42:47.7	04:33:53	41 N	091 E	4.9	N/A
Hagfors	04:42:39.1	04:33:50	43 N	093 E	5.4	4.0

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

04:34:04.9 42.5N 088.6E 5.0 N/A

The programs used for LASA, NORSAR and ALPA data recovery are presently undergoing modifications. Information for LASA short-period is reported from their Teleseism Event Report; NORSAR short-period data is obtained from their bulletin. The NORSAR TAL transmission plot included in this report has erroneous scaling factors. The long-period array beam recovery for these stations will be resumed upon completion of these modifications.

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at WH2YK, RK-ON, HN-ME, LASA and NORSAR. CPSO and FN-WV did not record "P" arrivals for this event and were not included in this report. All SP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal SP channels at WH2YK, RK-ON and HN-ME were rotated.

The SDCS stations did not record long-period signals for this event and were not included in this report.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response).

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NTIS	White Section <input checked="" type="checkbox"/>
DOC	Buff Section <input type="checkbox"/>
UNANNOUNCES	<input type="checkbox"/>
JUSTIFICATION	
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Dist	AVAIL. and/or SPECIAL

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT - PERIOD	LONG - PERIOD
ALPA	Alaska	65 14	00.0 N	626	None	31300
		147 44	36.0 W			
CPSO	McMinnville, Tennessee	35 35	41.4 N	574	6480 V	SL210 V
		085 34	13.5 W		7515 H	SL220 H
FN-WV	Franklin, West Virginia	38 32	58.0 N	910	KS36000	KS36000
		079 30	47.0 W			
LASA	Billings, Montana	46 41	19.0 N	744	HS10	7505A V
		106 13	20.0 W			8700C H
HN-ME	Houlton, Maine	46 09	43.0 N	213	KS36000	KS36000
		067 59	09.0 W			
NORSAR	Kjeller, Norway	60 49	25.4 N	379	HS10	7505A V
		010 49	56.5 E			8700C H
RK-ON	Red Lake, Ontario	50 50	20.0 N	366	18300	SL210 V
		093 40	20.0 W			SL220 H
WH2YK	White Horse, Yukon	60 41	41.0 N	853	18300	SL210 V
		134 58	02.0 W			SL220 H

HYPOCENTER DETERMINATION

INPUT FOR EVENT 20 MAR 76
04:33:53.0 41.000N 91.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST	REST	PEST
NAO	04 42 47.7	-0.1	0.2	48.4	320.2
WH2YK	04 45 24.5	0.2	0.1	71.2	21.0
RK-ON	04 46 49.4	-0.4	-1.5	87.0	1.4
HN-ME	04 47 01.8	0.4	-0.0	89.3	343.9
LAO	04 47 07.6	-0.1	1.3	90.2	10.1

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
04:35:59.6	51.020N	86.780E	727. CALC	0.3	6	5
04:34:04.9	42.517N	88.565E	0. REST	1.0	3	5

CALC				REST			
. 3				1 . 3			
1	.	0		1	.	0	
0	0.	0	0	0	0.	0	0
.
0	0.	0	0	0	0.	0	0
0	.	0		0	.	0	
0	.	0		0	.	0	

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 0.90
MAJOR 208.1KM. MINOR 45.0KM. AZ= 5 AREA= 29420 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 20 MAR 76
04:33:53.0 41.000N 91.000E OKN.

STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
NAO	EP	04 42 47.7		AB	0.5	38.	5.14			48.4
WH2YK	EP	04 45 24.5		SPZ	0.8	11.	4.64			71.2
RK-ON	EP	04 46 49.4		SPZ	0.6	21.	5.02			87.0
HN-ME	EP	04 47 01.8		SPZ	0.6	23.	5.06			89.3
LAO	EP	04 47 07.6		SAB	99.9	9999.				

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA
04:35:59.6	51.020N	86.780E	727. CALC	4.41	0.25	4
04:34:04.9	42.517N	88.565E	0. REST	4.97	0.22	4

WH2YK 20 MAR 76

SPZ
12.92 MU

0445:24.5



SPR
8.58 MU



SPT
12.46 MU



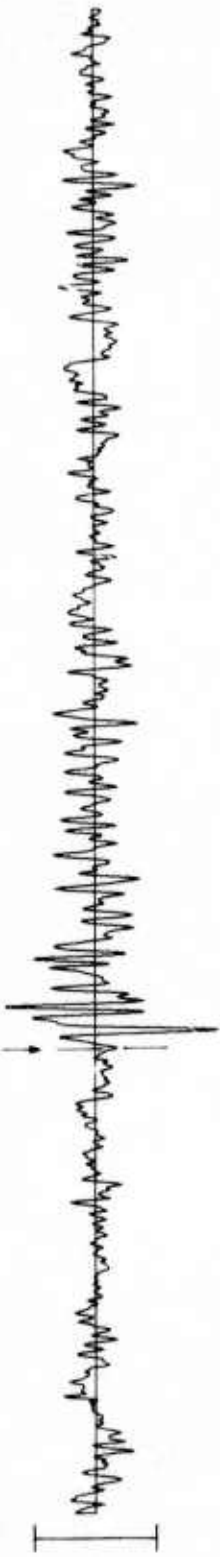
TIME



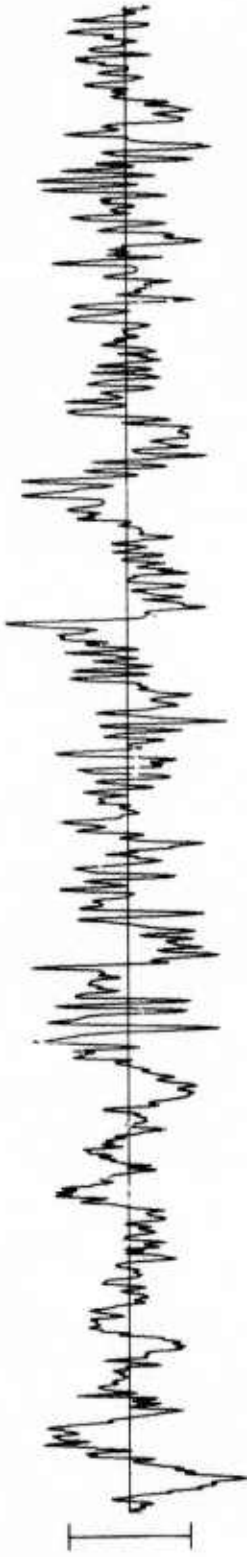
RK-ON 20 MAR 76

0446:49.4

SPZ
26.84 MU



SPR
8.89 MU



SPT
7.84 MU



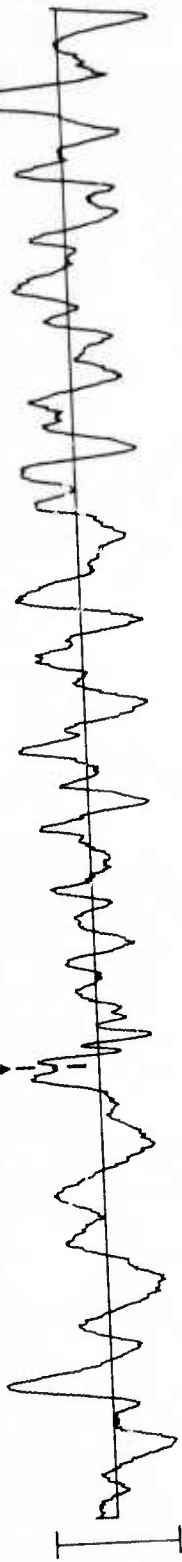
TIME



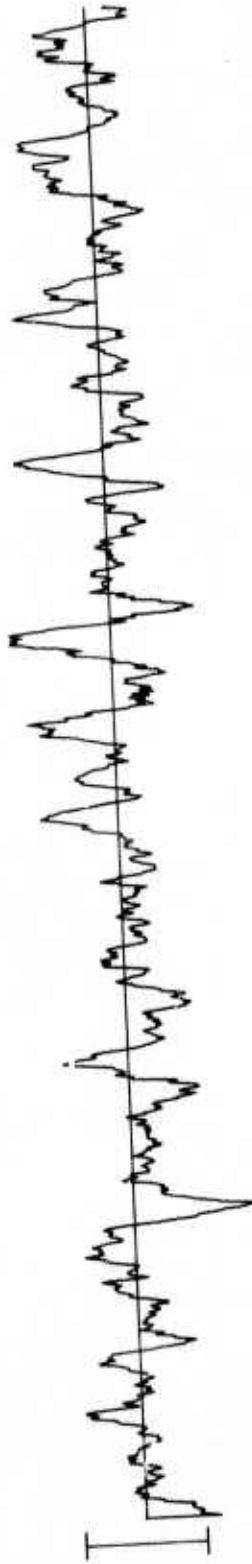
HN-ME 20 MAR 76

04:47:01.8

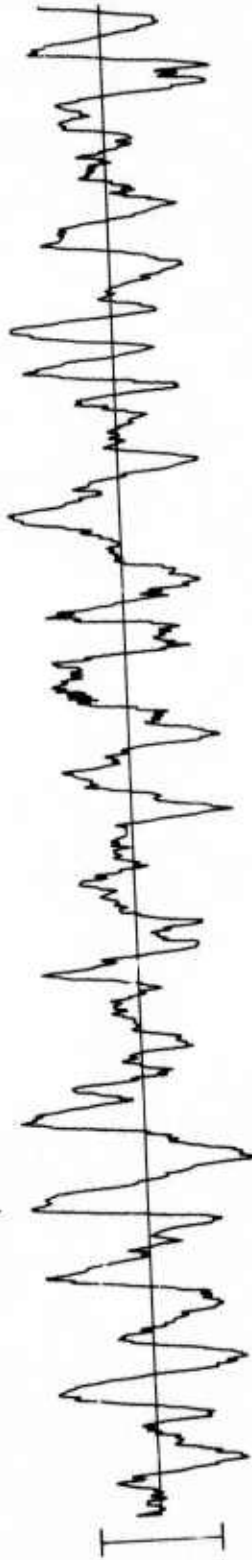
SPZ
46.17 MU



SPR
44.78 MU



SPT
22.72 MU



TIME





EPX 32650 NORSAR 20 MAR 1976
ORIGIN 04:33:53 41.1N 90.7E 4.8 MB
321 SOUTHERN SINKIANG PROV.
 $\Delta = 49.6$ BAZ= 77.1 C= 14.6 KM/SEC
ERRORS= 0

